| Γ        |                                       | Index of Claims |          |          |                     |         |         |         |    |    |          |     |             |                      | Application No. |  |            |            |             |              |     |         | Applicant(*)        |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |
|----------|---------------------------------------|-----------------|----------|----------|---------------------|---------|---------|---------|----|----|----------|-----|-------------|----------------------|-----------------|--|------------|------------|-------------|--------------|-----|---------|---------------------|----------|-------------------|----------|--------------------|------------|--|--------------|----------|-----------------|----------|---|--|---------|
|          |                                       |                 |          |          |                     |         |         |         |    |    |          |     |             |                      |                 | 08/704,159                             |            |            |             |              |     |         | WILLIAMS ET AL.     |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |
| 1        |                                       |                 |          |          |                     |         |         |         |    |    |          |     |             |                      |                 | 늗                                      | Examiner   |            |             |              |     |         |                     |          | Art Unit          |          |                    |            |  |              |          |                 |          |   |  |         |
|          |                                       |                 |          |          |                     |         |         |         |    |    |          | `   |             |                      |                 |  |            |            |             |              |     |         |                     |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |
| 1.       |                                       |                 |          |          | Ш                   |         |         |         | Щ  |    |          | ß   |             |                      |                 |  | 8          | Bao Qun Li |             |              |     |         |                     |          |                   |          | 16                 | 48         |  |              |          | _               |          |   |  |         |
| $\vdash$ |                                       | $\overline{}$   |          | _        |                     |         |         |         |    |    |          | _   |             |                      | _               |  |            |            |             |              |     |         |                     |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |
|          |                                       |                 |          | Г        |                     |         |         | ٦       |    |    |          | 1   | rou         | nh i                 | TLIF            | 101                                    | (او        |            |             | ۲            | Τ   | ••      |                     |          | 1                 | П        |                    | <b>A</b> - |  |              |          |                 |          |   |  |         |
|          | √ Rejected — (Through nur<br>Cancelle |                 |          |          |                     |         |         |         |    |    | đ        | ₩., |             |                      | H               | Non-Elected                            |            |            | ted         | l            | A   | Appea   |                     |          | E 6               |          |                    |            |  |              |          |                 |          |   |  |         |
| 1        |                                       |                 |          | -        | ┝                   |         |         | 4       |    | -  | ┝        |     |             |                      |                 |  | _          |            | ٠           |              | t   |         | 1                   | Н        |                   |          |                    | _          |  |              |          |                 |          |   |  |         |
| 1        | # Allowed + Restricted                |                 |          |          |                     |         |         |         |    |    |          |     |             | 1                    | Inter           |  | 0          | •          | <b>D</b> 6) | ect          | •0  |         |                     |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |
|          |                                       |                 |          |          |                     |         |         |         |    | •  | نسا      | _   | <del></del> |                      |                 | J                                      | لسا        | _          |             |              |     |         | ,<br>               |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |
|          | -                                     | Cl              | im       | T-       |                     |         | D       | 160     |    |    | 7        | 9:  | CL          | nic                  | Т               |  |            |            | )at         | •            |     |         | C                   | Claim    |                   | Date     |                    |            |  |              |          |                 |          |   |  |         |
| 1        |                                       |                 | _        |          | П                   | Т       | Ť       | Ť       | T  | Г  |          | ÷   |             |                      | Т               | T                                      | Г          |            |             | Γ            | Τ   | $\top$  | -18                 |          | -                 | soffer.  | П                  | T          | T                                      |              |          |                 |          | : |  |         |
|          |                                       | Final           | 3        |          |                     |         | 1       |         | 1  |    |          | 17. | Final       | 롲                    | 1               | Į                                      | l          |            |             |              | 1   |         | ×.                  | Final    | 8                 | 19       |                    | 1          |  | 1            |          |                 |          |   |  |         |
|          |                                       | Ĕ               | Original |          |                     | -       | 1       | 1       | 1  |    |          |     | ü.          | Original             |                 | 1                                      | [          |            |             |              | ı   |         | 1                   | III.     | 5                 | 8        | ļ                  |            |  | i            |          |                 |          |   |  |         |
|          |                                       | <u> </u>        |          | ļ.,      |                     | -       | 4       | -       | +  | -  | -        |     |             |                      | ┝               | ╄                                      | ┝          | -          | _           | -            | ╀   | ++      | <u> </u>            | -        | TO SE TOTON       | 12       | -                  | ╅          | ┿                                      | ┰            | ╀        | Н               | $\dashv$ |   |  |         |
|          |                                       | -               | 1/2      | -        | $\vdash$            | +       | +       |         | ╁╌ | ┢  | H        | ô   |             | 51<br>52             | ╁               | ╁                                      | ┢          |            |             | 一            | 十   | ++      | 732                 | -        | 1 No.             | Н        | $\top$             | 十          | 1                                      | T            |          |                 |          |   |  |         |
|          |                                       | _               | 13       | -        | H                   | +       | 十       | +       | +  | 1  | H        |     |             | 1 53                 | •               | 1                                      |            |            |             |              | T   |         |                     |          | i do              |          |                    | $\perp$    |  |              |          |                 |          |   |  |         |
|          |                                       |                 | 14       |          |                     |         | I       |         | I  |    |          | Ž.  |             | 54<br>55<br>56<br>57 |                 |  |            |            |             |              | Γ   | $\Box$  |                     |          | 114               |          | $\dashv$           | $\perp$    | 1                                      | ļ            |          | Н               | Ш        |   |  |         |
| 1        |                                       |                 | 13       |          |                     | 工       | I       | I       | L  |    |          | *   |             | 58                   | L               | <u> </u>                               | _          |            | _           | L            | ╀   | -       | -1:.                |          | 115               | Н        | 4                  | ╀          | +-                                     | ╀            | -        | Н               | Н        |   |  |         |
| 1.       |                                       |                 | 119      | -        | Н                   | +       | 4       | +       | ╀- | -  | 1        | ွ   |             | 35                   | ╄               | ╀                                      | ╄          | -          | Н           | ┝            | ╀╌  | ╌┼╌┼    | - 134               |          | 185<br>188<br>117 | Н        | -                  | ┿          | ┿                                      | ╁            | +-       | Н               | Н        |   |  |         |
| ] /      |                                       | _               | 17       | -        | $\vdash$            | -       | +       | +       | ┿  | ┝  | H        | Š   |             | 58                   | ╀               | ╁╌                                     | ┢          |            |             | <del> </del> | +   | ++      |                     |          | 100               | Н        | -                  | 十          | †                                      | 1            | 1        | Н               | $\dashv$ |   |  |         |
| 1        | *                                     |                 | 16       | +-       | Н                   | +       | 十       | +       | +  |    |          | **  |             | V                    | 1               |  | Ι.         |            |             | -            | †   |         |                     |          | 100               |          |                    | Ŀ          |  | -            | Ŀ        |                 |          | • |  | · · · • |
|          | 7:                                    |                 | lo       |          |                     |         | T       |         | T  |    |          |     |             | M                    | L               |  |            |            |             |              | I   | $\prod$ |                     |          | 110               |          | I.                 | L          |  |              |          |                 |          |   |  |         |
| -        | . 7                                   |                 | 11       |          |                     | $\Box$  | $\perp$ | $\perp$ | I  |    |          | 3   |             | 61                   | 1               |  |            |            |             |              | L   |         |                     |          | 11                | Н        | -                  | 4          | +                                      | ↓_           |          | Н               | $\dashv$ |   |  |         |
| 1        | _ •                                   |                 | 12       |          | П                   | 1       | 4       | 4       | 1  | -  |          |     |             | 63<br>60             | ╄               | ┞-                                     | ┡-         | -          | -           | -            | ╀   | ┵┵      |                     |          | 110               | -        | +                  | ┿          | ┿                                      | ⊢            | ┢        | Н               | $\dashv$ |   |  |         |
| 1        | 1.8                                   |                 | 3        | -        | Н                   | -       | 4       | - -     | ╀  | -  |          | 2   |             | 133                  | ╄               | ┝                                      | ├-         | -          |             | -            | ╀   | ╌┼╌┤╴   | - -                 | -        | 114               | F        |                    | ┿          | ╁                                      | ╁╌           | -        | Н               | $\dashv$ |   |  |         |
|          | 63                                    | _               | 4        | ╁╌       | $\vdash$            | +       | ╅       | +-      | ┿  | 1- | H        | 9   | -           | 64                   | ╁╌              | ╁╌                                     | ┢          | H          | -           | -            | t   | ++      |                     |          | 115               |          | 一                  | 十          | 十                                      | 1            |          |                 |          |   |  |         |
| 1        | ***                                   | _               | 18       | $\vdash$ | H                   | 十       | 十       | 1       | 十  |    |          |     |             | 68                   | -               | 1                                      |            |            |             |              | ۲   |         | 38                  |          | 116               |          |                    | I          | ${\mathbb L}$                          |              |          |                 |          |   |  |         |
|          | 69,23,04                              |                 | *        |          |                     |         | 土       |         | 1  |    |          | 11  |             | 65<br>67             |                 |  |            |            |             |              | Ι   |         |                     |          | 117               | M        | $\perp$            | T          |  |              |          |                 |          |   |  |         |
| 1.       |                                       |                 | 19       |          |                     |         | I.      |         | L  |    | Щ        | 3   |             | 3                    | ↓               | ┞                                      | <u> </u>   | -          |             | <u>_</u>     | ╀   | 4-1     |                     |          | 410               |          |                    | ╀          | ╀                                      | ┞-           | -        | Н               | $\dashv$ |   |  |         |
|          | 0                                     |                 | 1        |          | Н                   | -       | 4       | - -     | +- | -  |          | 3   |             | 68<br>70<br>71       | -               | <del> </del>                           | ┞-         | -          | _           | ┡            | ╀   | ┵┵      | -12                 |          | 445               |          | -                  | ┿          | ╀                                      | ┢            | ┥        | Н               | $\dashv$ |   |  |         |
|          |                                       | -               | 27       | -        | ┰                   | +       | ┿       |         | ┿  | -  | -        |     |             | +                    | ╁               | ╁                                      | ┢          |            | -           | -            | +   | ╅╅      | - 6                 |          | 121               | lŭ       | _                  | +          | 1                                      | ┢            | m        | Н               | ᅱ        |   |  |         |
| -        |                                       |                 | 園        | 1        | H                   | +       | +       | +       | †- |    |          | ٧.  |             | 1                    |                 | 1                                      |            |            |             | Т            | 1   |         |                     | 1        | 14                |          |                    | T          |  |              |          |                 |          |   |  |         |
| ÷        |                                       |                 | 23       |          |                     | $\perp$ | Ť       |         | 1  |    |          | ب   |             | *                    |                 |  |            |            |             |              | L   |         |                     |          | 100               |          | $\Box$             | L          | oxday                                  | ļ            |          |                 |          |   |  |         |
| ,        |                                       |                 | 24       |          |                     |         | 1       |         | _  |    | Ц.       |     |             | 14                   | <u>_</u>        | ┞                                      | <b>!</b> _ | -          |             | _            | Ļ   | ╌┼╌┼    | - 3                 |          | 124               | M        | -                  | +          | ┼                                      | ┞            | Н        | Н               |          |   |  |         |
|          | 1                                     | -               | 25       | -        | $\vdash$            | 4       | -       |         | ┿  | -  | -        |     |             | 7                    | ₩               | ┢                                      | ├          |            |             | -            | ╀╌  | ┿┿      |                     |          |                   | H        | -+-                | ┿          | ╁                                      | ├-           | ╌        | Н               | $\dashv$ |   |  |         |
|          | 100                                   |                 | 25<br>21 | -        | Н                   | ┰       | +       | +       | ╁╌ | -  | H        | ž   |             | #                    | ┰               | ┢                                      | ┢╼         |            | -           | -            | +   | ++      | $\dashv \mathbb{C}$ |          |                   | -        |                    | +          | ╈                                      | ┪            |          |                 | -        |   |  |         |
|          | 0                                     | μ-              | 21       |          | H                   | 十       | 十       | 十       | +- | -  |          |     |             | 7                    | 1               | 1                                      | 1          |            |             | -            | ۲   |         |                     |          | 19                |          |                    |            |  |              |          |                 |          |   |  |         |
|          | 0                                     |                 | 79       |          |                     |         |         |         |    |    |          | 3   |             | 79                   | L               |  |            |            |             |              | Γ   |         |                     |          | 100               |          | $\Box$             | L          |  |              |          |                 | _        |   |  |         |
|          | 20,05                                 |                 | 10       |          |                     | I       | I       | I       |    |    |          | 3   |             | 80                   | Ĺ               | L                                      | Ĺ          |            |             | Ĺ            | L   | 44      | 434                 |          | 1930              | 1-1      | -                  | +          | +-                                     | <del> </del> |          | $\vdash \dashv$ | -1       |   |  |         |
|          | 10                                    | <b>-</b>        | 3)       | -        | $\vdash \downarrow$ | 4       | +       | 4       | -  | -  | :        |     |             | 1                    | ╀               | +                                      | ⊢          | -          | _           | -            | ╀   | +-+     |                     |          | 12                | ╞┤       | +                  | ┿          | +-                                     | ┼-           | 1-       | Н               | $\dashv$ |   |  |         |
|          |                                       | -               | 37<br>71 | -        | $\vdash \vdash$     | +       | - -     | +       | +- | -  | H        | á   |             | 82<br>83             | +-              | +                                      | +          | -          | -           | $\vdash$     | ۲   | ╁┼      | -  · i              |          | 3                 | ╁╼┧      | +                  | 十          | +-                                     | +            | t        | $\vdash \vdash$ | $\dashv$ |   |  |         |
|          | 2                                     | -               | 廿        | +-       | H                   | +       | +       | +       | +- | 1  | H        | 3   |             | Ti.                  | +               | 十                                      | 1          |            |             | -            | +   | 11      | 192                 |          | 1.10              | 1.1      | _                  | 1          |  |              |          |                 |          |   |  |         |
| (        | 0,                                    |                 | у<br>34  |          | $\Box$              | _       | 1       | 1       |    |    |          | č   |             | 84                   |                 |  |            |            |             |              | T   |         |                     |          | 1                 |          |                    | Ι          |  |              |          |                 |          |   |  |         |
|          | 7                                     | $\Box$          | 38<br>31 |          |                     | $\Box$  | I       | $\perp$ | L  |    |          |     |             | 80<br>87             | L               |  |            |            |             |              | L   |         | 日終                  |          | 136               | Ц        | 4                  | 1_         | $\perp$                                | ļ            |          | Н               | $\dashv$ |   |  |         |
| '        |                                       | /_              | 131      |          | Н                   | 4       | 4       | 4       | 1_ | _  | <u> </u> | **  |             | 1                    | ļ.,             | <b> </b>                               | <u> </u>   |            | _           | ļ            | ļ., |         |                     |          | 137               | $\vdash$ | -                  | +          | +-                                     | <del> </del> | Н        | ⊢┤              |          |   |  |         |
|          | $\rightarrow$                         | <u> </u>        | 3        | -        | H                   | -       | +       | +       | ╫  | -  |          |     |             | 8                    | ┢               | ┼-                                     | ┢          | -          |             | -            | ╀   | ┪       | - 3                 |          | 138               | $\vdash$ |                    | ┿          | ┿                                      | ╁╌           | Н        | Н               | $\dashv$ |   |  |         |
|          |                                       | -               | *        | ┝        | ┢                   | ┿       | +       | +-      | ┿  | -  | -        |     |             | 9                    | 十               | <del> </del>                           | ┢          |            |             | 一            | t   | ++      |                     | <b></b>  | 140               | Н        | +                  | 十          | $\top$                                 | 1            |          |                 |          |   |  |         |
|          |                                       |                 | A        |          | H                   | +       | +       |         |    |    |          |     |             | 9<br>8               |                 |  |            |            |             |              | L   |         | 20                  |          | 141               |          |                    | 1          | 工                                      |              |          |                 |          |   |  |         |
|          |                                       |                 | X        |          |                     |         | I       | $\perp$ | I  |    |          |     |             | 90                   | 1               |  | L          |            |             |              | L   |         |                     |          | 142               |          | T                  | T          | L                                      | L            | Ш        | Ш               | _        |   |  |         |
|          |                                       |                 | 4        |          | П                   | I       | T       | $\perp$ | L  |    |          | Š   |             | 8                    | L               | 1                                      | L          |            |             | Ĺ            | L   | +       |                     | <b>-</b> | 143               | $\vdash$ | 4                  | 4-         | +                                      | ├-           | -        | $\vdash \dashv$ |          |   |  |         |
|          |                                       | <u> </u>        | #        | -        | ₩                   | 4       | +       | +       | ╂  |    | H        | Å,  |             | 븼                    | ╀               | <del> </del>                           | -          | -          | -           | -            | ╀   | ╅┼      | <b>→</b> *§         |          | 144               |          | +                  | ╁          | +                                      | +            | $\vdash$ | $\vdash \vdash$ | $\dashv$ |   |  |         |
|          |                                       | ├               | \$       | -        | ┝┥                  | +       | +       | +-      | -  | -  | H        |     |             | 끊                    | +-              | ┢                                      | -          | -          | -           | -            | +   | ╅       | -                   |          | 146               | $\vdash$ | +                  | ╁          | +                                      | $\vdash$     |          | Н               | $\dashv$ |   |  |         |
|          |                                       |                 | <b>6</b> |          | H                   | ╅       | ╅       | +       | +- |    | H.       |     | _           | 努                    | t               | †                                      | H          |            | -           |              | t   | 1       | 129                 |          | 147               |          | 1                  | T          | 1                                      |              |          |                 |          |   |  |         |
|          |                                       | _               | 48       |          | 1                   | 1       | 1       | 1       | 1  |    |          | Ŷ   |             | B<br>Se              | Γ               |  |            |            |             |              | Ι   |         |                     |          | 148               |          | $oldsymbol{\perp}$ | I          |  |              |          |                 |          |   |  |         |
|          |                                       |                 | 40       |          |                     | 工       | I       | I       | I  |    |          |     |             | 189                  | L               | L                                      | 匚          |            |             | F            | L   | 4-1     | 43                  | ļ        | 140               | $\vdash$ | 4                  | 1          | $\vdash$                               | -            |          | ⊢⊣              | $\sqcup$ |   |  |         |
|          |                                       |                 | 50       | L.,      | П                   | $\perp$ | لـ      |         |    |    |          | ς,  |             | 100                  | _               | ــــــــــــــــــــــــــــــــــــــ | ٠.         |            |             | L            | L   |         | الدالي              | ــــ     | 150               | لبل      |                    |            | ــــــــــــــــــــــــــــــــــــــ | ـــا         | لــا     | لــا            | لب       |   |  |         |
|          |                                       |                 |          |          |                     |         |         |         |    |    |          |     |             | ,                    |                 |  |            |            |             |              |     |         |                     |          |                   |          |                    |            |  |              |          |                 |          |   |  |         |